



Year 2001 Progress Report of Activities

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Cape May Plant Materials Center

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Who We Are

The Cape May Plant Materials Center (PMC) is a branch of the United States Department of Agriculture, Natural Resources Conservation Service (NRCS). It is one of 26 Plant Materials Centers located throughout the United States. The Cape May PMC began operations in 1935. The facility was established for the purpose of testing and developing plants for the coastal plain needs of a nine-state area which includes: Massachusetts, Rhode Island, Connecticut, Long Island New York, New Jersey, Maryland, Delaware, Virginia, and North Carolina. The service area is comprised of over 65 million acres, 128 field offices and almost 25% of the U.S. citizenry.

Original Congressional Charter

The Ash Wednesday storm of 1962 pounded the coastal shoreline of the Mid-Atlantic States destroying public and personal property in coastal municipalities along a multi-state area. As a result of public concern, the 88th U.S. Congress authorized the establishment of the Cape May Plant Materials Center (PMC) to be staffed and operated by the United States Department of Agriculture Soil Conservation Service recently renamed the Natural Resources Conservation Service (NRCS). Since the PMC opened, it has addressed many diverse and highly varied priorities. The PMC staff continues to demonstrate remarkable resilience, and flexibility in responding to the ever-changing challenges.

What We Do

It is our mission to develop plant materials and state-of-the-art plant science technologies to meet the needs of NRCS's "Call to Conservation".

During 2001, 100% of our activity focused on native plants in the following priority areas:

- Riparian and Field Buffer Needs.
- Native Species for Farm-Bill Programs
- Native Woody Plants for Soil Bio-Engineering
- Tidal and non-Tidal Shoreline Stabilization
- Coastal Dune Ecosystem Management

A brief summary of some of our activities is in the following report.



Photo of *Prunus serotina* by Bill Skaradek

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USDA NRCS and ARS Interagency Aerenchyma Tissue Investigations.



Without a doubt this was the most labor intensive study done at the Cape May PMC in recent time. Pictured above left to right is Bill Skaradek, Dr. Richard Zobel, USDA ARS Beckley WVA, Dr. Howard Skinner USDA ARS Penn. State and Noel Murray. Many other personnel from the NY and National PMC's were present but not in the photo

The purpose of this study was to screen all NRCS warm season grasses for presence of aerenchyma tissue both facultative and constitutive. The presence or absence of aerenchyma can determine if a warm season grass will have the plant physiological capability of developing roots into saturated soil environments. This would in-turn assist the NRCS FOTG to spec out only those warm season grasses with aerenchyma to be used in riparian buffer application or other applications where high water table levels are expected.

ARS is working out the software details to complete the synthesis of data gathered for the purposes of making FOTG revisions.

Remnant American Prairie Products On-Line and Ready to go.



Photo of Farm Foreman Futrell inspecting Suther Big Bluestem for harvest by Bill Skaradek.



Photo of Suther Prairie Indiangrass by Bill Skaradek

2001 marked a significant turning point for the development of Suther Prairie big bluestem, little bluestem and Indiangrass. PMC staff worked diligently to expand production capabilities via vegetative propagules. Ernst Conservation Seeds has requested to begin commercial seed production in 2002.

Protecting New England Natural Heritage by Developing Local Eco-types.



Photo of Blackstone River and Floodplain by Bill Skaradek

The protection and enhancement of New England's native flora is a paramount concern of conservation partners, the NRCS and the Cape May Plant Materials Center.

Responding to leadership directives the Cape May PMC manager spent copious quantities of time traversing Connecticut, Rhode Island and Massachusetts to locate and collect Indiangrass, Big bluestem, little bluestem and roundhead clover.

Above is a typical elevated floodplain terrace, excessively well drain sand which is suitable for native warm season grass prairie plant communities. This parcel along the Blackstone River in CT has been largely undisturbed for many decades and naturally displays a plant community comprised of switchgrass, Indiangrass, big bluestem, little bluestem, roundhead clover, deer tongue, and much more. These were the types of sites collected from throughout the 3 state collection area. Collection efforts were successful and plants have been started for producing genetically broad-based ecotypes of New England origin native plants.